

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Luca Bertamini et al.
Application No.: 10/809,667
Filing Date: March 25, 2004
Confirmation No. 7825
Title: IMPROVED POLYOLEFIN-BASED SYNTHETIC
FIBERS AND METHOD THEREFOR
Examiner: L. B. Tentoni
Group Art Unit: 1732

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop AF
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Final Office Action mailed December 14, 2005, and the advisory action mailed March 13, 2006, Applicants hereby request review of the final rejection in the above-identified application. No Amendment is being filed with this request.

This request is being filed with a notice of Appeal.

The review is requested for the reason(s) stated on the following attached pages.

REMARKS

Claims 1-11 and 17-27 remain in the application.

In the advisory action, the rejection of claims 1-11 and 17-27 under 35 U.S.C. §112, second paragraph was overcome by the amendment filed on 27 February 2006. Accordingly, the only remaining rejections for which Applicants seek this review are the rejection of claims 1-11 and 17-27 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,811,040 to Mallonee and under 35 U.S.C. §103(a) as being unpatentable over the '040 patent.

As set forth in more detail below, the examiner has not shown where the '040 patent provides all of the elements of the claimed invention either explicitly or implicitly or where the '040 patent suggests using a depth to hydraulic diameter ratio when drawing filaments through a capillary to change a characteristic of the drawn fibers. Hence, the 35 U.S.C. §102(b) and 103(a) rejections are in error.

Claims 1-11 and 17-27 Are Not Anticipated or Obvious Over The Cited Reference.

Applicants' claims, as amended on 27 February 2006, contain a limitation with respect to the spinneret used to draw filaments wherein a depth to hydraulic diameter ratio of the spinneret is used with a certain shear rate to provide certain filament properties. (See page 2, claim 1, and page 3, claim 17 of the 27 February 2006 amendment). As set forth in the foregoing amendment on page 6, lines 8-14, the depth to hydraulic diameter ratio of the spinneret can be used to change the amount of nylon fibrils present on the surface of filaments extruded through the spinneret.

The depth to hydraulic diameter ratio is a physical characteristic of the spinneret used to draw the fibers as set forth in the specification on page 13, lines 4-6. The depth and hydraulic diameter terminology was clearly explained to the examiner in the response filed on 11 October 2005 on page 10 section B to page 11 and in the attached literature articles and is supported by the specification. The depth to hydraulic diameter ratio limitation is not a characteristic of the filaments or fibrils drawn through the spinneret.

In the rejection of the claims under 35 U.S.C. §102(b) and/or 103(a), the examiner relies on the examples in the '040 patent. The examples in the '040 patent give the leg lengths and the leg widths of "each trilobal capillary" (See for example col. 8, lines 31-32 and FIG. 1 of the '040 patent). It is without question that such dimensions are only useful for determining the hydraulic diameter of a trilobal capillary. The '040 patent is absolutely silent as to the depth dimension of the capillary, whether trilobal or not. The examiner has failed to find this dimension in the '040 patent or any suggestion to the use of a ratio of the depth to hydraulic diameter for any purpose in the '040 patent. Hence, the examiner has failed to show where the '040 patent teaches or discloses this element of the claimed invention either explicitly or implicitly.

The fact is the only length and diameter ratios mentioned in the '040 patent are with respect to fibrils that may be embedded in or on the filaments produced by drawing the polymers through the capillaries. (See tables 5 and 6 of the '040 patent). The foregoing does not teach, suggest, or disclose anything with respect to the capillary depth dimension, hydraulic diameter dimension, and ratio between the depth and hydraulic diameter.

The examiner states, in the advisory action, that Example 1 of the '040 patent uses the same spinneret as Example 1 of the present application. However, example 1 of the present application is silent as to the depth to hydraulic diameter ratio. It is an undisputed fact that example 1 of the '040 patent is also silent as to the depth to hydraulic diameter ratio of the capillary. Example 1 of the present application is not specifically directed to the depth to hydraulic diameter ratio of claims 1 and 17, whereas example 6 of the present application illustrates the effects on the resulting filaments of using capillaries having different depth to hydraulic diameter ratios. Hence, even if similar leg lengths and widths (i.e., hydraulic diameter) of the capillaries are used as in the '040 patent and the examples of the present application, the examiner has failed to show where there is any teaching, suggestion, or disclosure in the '040 patent with respect to the depth of the capillaries. Likewise, the examiner has failed to provide any reference in the '040 patent

to the depth to hydraulic diameter ratio of the capillaries and its effects on the filaments drawn through the capillaries.

In summary, the examiner has failed to show where the '040 patent teaches, discloses or suggests a capillary depth dimension and a ratio of capillary depth to hydraulic diameter. It is for this error that applicants respectfully request this review.

Respectfully submitted,

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By:



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